

December 6, 2018

Mr. Stuart Beck  
Director of Certification  
Nemko North America, Inc.

Dear Mr. Beck,

This letter describes the C2PC for the CommScope UAP remote antenna, FCC ID: BCR-IOEUAP and IC ID: 2237D-IONEUAP.

There are four minor variants of the CommScope UAP. The differences between these variants are summarized in the table below and described in some detail following the table.

Model Number	Name	Description
UAP	ION-E UAP, 380-2700 MHz	Original remote antenna unit. Four 75MHz BW transceivers, internal antenna
UAP-X	ION-E UAP, EXTERNAL ANTENNA (UAP-X)	Identical to 7642133-01, except an external antenna is used.
UAP-N25	ION-E UAP, 25MHz SAW (UAP-N25)	Identical to 7642133-01, except one of the RX paths uses a 25MHz BW IF SAW filter instead of a 75MHz BW SAW filter.
UAP-XN25	ION-E UAP, EXT ANTENNA, 25 MHz SAW (UAP-XN25)	Identical to 7642133-01, except one of the RX paths uses a 25MHz BW IF SAW filter instead of a 75MHz BW SAW filter, and an external antenna can be used.

The UAP-X is identical to the UAP, except that the UAP-X removes the internal TX/RX antenna and its feed network, and instead provides 50 ohm connections to the same points in the TX and RX chain where the internal antenna feed network connected. The TX/RX circuits are identical and all active components are identical in both the UAP and UAP-X. Both use the same PCB.

The non-radiated measurements for the UAP are measured using a test connector on the PCB that bypasses the internal antenna, and this test connector

is

electrically at the same location as the connector on the UAP-X used to connect an external antenna, so performance will be equivalent.

The UAP-N25 is identical to the UAP, except that the UAP-N25 uses a narrower 25MHz IF SAW filter in one of the RX paths (instead of 75MHz) to provide better rejection of nearby TX signals. The TX paths are identical in both the UAP-N25 is identical to the UAP.

The UAP-XN25 is identical to the UAP, except an external antenna connection is provided (in the identical manner as UAP-X) and the UAP-XN25 uses a narrower 25MHz IF SAW filter in one of the RX paths (in an identical manner as UAP-N25).

The software changes affecting these remote antenna units were done were to enable operation in additional bands and to recognize the different variants. The same SW runs on all variants.

UAP, 380-2700 MHz Label



# UAP-X , EXTERNAL ANTENNA Label



# UAP-N25, 25MHz SAW Label



UAP-XN25, EXT ANTENNA, 25 MHZ SAW Label



Sincerely,

Van Hanson

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